

# OUTCOMES OF UPPER GASTROINTESTINAL BLEEDING ARE SIMILAR BETWEEN DIRECT ORAL ANTICOAGULANTS AND VITAMIN K ANTAGONISTS: A SUBGROUP ANALYSIS OF A FRENCH PROSPECTIVE MULTICENTER STUDY.

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**Introduction:** Management of oral anticoagulants remains challenging during upper gastrointestinal bleeding (UGIB). Outcomes of UGIB are not worse in patients treated with vitamin K antagonists (VKA) but a reversion of the anticoagulation can be easily done contrary to direct oral anticoagulants (DOACs) (1). DOACs belong to a new therapeutic class with conflicting results on the associated risk of UGIB that might be increased (2). This study aimed to describe epidemiology, endoscopic management and outcomes of UGIB in patients treated with anticoagulants.

**Aims & Methods:** From November 2017 to October 2018 a prospective multicenter study in French general hospitals enrolled all consecutive patients with UGIB. Data were collected with an e-CRF. All patients treated with an anticoagulant at the time of the UGIB were retrieved from the cohort and assessed. Main outcomes were mortality at 6 weeks, rebleeding during the first 6 weeks and need for nonendoscopic treatment (surgery, interventional radiology).

**Results:** Among the 2498 patients included, 475 (19%) were treated with an oral anticoagulant: 267 (56.2%) with VKA (fluindione n=200 (75%), warfarin n=67 (25%)) and 208 (43.8%) with DOACs (rivaroxaban n=114 (55%), apixaban n=73 (35%), dabigatran n=21 (10%)). This cohort was mostly composed of men (65%), mean age was 78.7 ( $\pm 8.2$ ) and mean Charlson score was 3.2 ( $\pm 2.5$ ). Baseline characteristics were similar between groups except for the association of kidney failure and cirrhosis that was more prevalent in the VKA group. Gastroscopy was performed in 470 patients (98.9%), described as normal in 73 (15.3%) and showed active bleeding in 117 (24.9%). In the end, bleeding was imputed to a peptic origin in 233 cases (49%), vascular origin in 37 cases (7.8%) and 27 cases (5.7% each) for portal hypertension and tumor, without difference between VKA and DOACs. Endoscopic treatment was performed in 128 (26.9%) patients leading to a bleeding resolution in 95 cases (74%). Mortality rate at 6 weeks was 12.4% (n=59) more elevated in the VKA group compared to DOACs (16.1 versus 7.8%,  $p < 0.01$ ). By multivariate analysis, only the Charlson index  $\geq 5$  and UGIB of inpatients were independently associated with mortality. Rebleeding (n=56, 11.8%) and need for non-endoscopic treatment (n=18, 3.8%) were not associated with the type of anticoagulant. Predictive factors for rebleeding were antiplatelet agents intake that was associated with a higher risk (OR=2.7,  $p = 0.009$ ), whereas with betablockers the risk seemed to be lower (OR=0.4,  $p = 0.0072$ ). Tumoral origin of the bleeding was the only factor associated by multivariate analysis (OR=6.7,  $p = 0.0064$ ).

**Conclusion:** DOACs do not alter outcomes of UGIB as compared to VKA. Comorbidities and their related treatment turn out to be the most important factors worsening the prognosis of UGIB.

## References:

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**Disclosure:** Nothing to disclose